DFW demo
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Airborne Research Integrated Experiments System

ARIES

NASA's Boeing 757-200 aircraft is a "flying laboratory" for aeronautical research. The aircraft, called ARIES, is used to conduct research to increase aircraft safety, operating capability, and compatibility with future air traffic control systems.

ARIES is an integral part of NASA's simulation-to-flight concept. This concept incorporates common software, hardware and processes for both flight simulators and the 757. The result is an efficient and cost-effective way to develop and test new technology concepts.

Date of Manufacture:	March, 1982
First Revenue Flight:	August, 1983 Eastern Airlines
Arrived at Langley:	May, 1994
Cost to NASA:	$24 Million
Description:	Twin engine, commercial transport, powered by Rolls Royce RB211-535E4 engines
Max. Take-off Gross Weight:	230,000 lbs.
Max. Cruising Speed:	.86 Mach
Max. Range:	3,836 km.;2,383 miles
Ceiling:	42,000 feet
Length:	155'3"
Fuselage Width:	12'4"
Height:	44'6"
Wing Span:	124'10"
Flight Crew:	2 pilots (plus subj. pilot for research flights)
Research Crew:	12 pallets: 9 "attended" pallets = 20 people; 3 "unattended" pallets; up to 18 extra seats
Typical Missions:	*Weather information systems
	*Error-proof flight deck
	*Synthetic vision systems
	*Runway incursion prevention technologies

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